Amendment

In the Claims

Claims 1-43. (Canceled)

44. (Currently amended) A method of recruiting progenitor cells to a site in the body of a subject comprising:

introducing at the site in the body of the subject an implant comprising an external porous housing having pores of a size sufficient to allow movement into the implant of the progenitor cells to be recruited and a drug delivery system contained within the housing, ~~that includes~~ wherein the drug delivery system comprises one or more factors selected from the group consisting of growth factors, angiogenic/vasculogenic factors and bone marrow recruiting factors, and

allowing sufficient time for the progenitors cells to migrate to and enter the implant~~, and~~

~~optionally, removing the implant from the subject and isolating the progenitor cells~~.

Claim 45. (Canceled)

46. (Previously presented) The method of claim 45, wherein the external porous housing is composed of a polymeric mesh and the drug delivery system comprises a plurality of microspheres, microparticles, nanospheres, macrospheres, nanoparticles, macroparticles, matrices, beads, films, rods, coatings or hydrogels.

47. (Currently amended) The method of claim 46, wherein the polymeric mesh is composed of one or more polymers selected from the group consisting of nylon, poly-L-

lactide (PLA), poly(lactide-co-glycolide) (PLGA), poly(fumaric acid:sebacic acid) co-polymer ~~or~~ and polycaprolactone.

48. (Previously presented) The method of claim 44, wherein the angiogenic/vasculogenic factors are selected from VEGF-A, VEGF-B, VEGF-C, VEGF-D, VEGF-E, aFGF, bFGF, angiopoietin-1, angiopoietin-2, angiogenin, Del-1, follistatin, HGF/SF, leptin, midkine, PLGF, PD-ECGF, PDGF-BB, PTN, progranulin, proliferin, TGF-alpha, TGF-beta, TNF-alpha, IGF-1 and IGF-2, and the bone marrow recruiting factors are selected from GM-CSF, G-SCF, SDF-1α, SDF-1β, MCP-1, stem cell factor/kit ligand, M-CSF, IL-8, SF20 and HCC-1.

49. (Previously presented) The method of claim 44, wherein the one or more factors are GM-CSF and VEGF.

50. (Previously presented) The method of claim 44, wherein the progenitor cells are selected from endothelial progenitor cells, hematopoietic progenitor cells, hemangioblasts, neural progenitor cells, and epithelial progenitor cells.

51. (Previously presented) The method of claim 44, wherein the hematopoietic progenitor cells are CD133+ or CD34+ cells.

Claims 52-54. (Canceled).

55. (Currently amended) An implant for recruiting progenitor cells to a site in the body of a subject comprising an external porous housing having pores of a size sufficient to allow movement into the implant of the progenitor cells to be recruited and a drug delivery system comprises a plurality of microspheres, microparticles, nanospheres, macrospheres, nanoparticles, macroparticles, matrices, beads, films, rods, coatings or hydrogels, ~~and further including~~ wherein the drug delivery system comprises one or more

factors selected from the group consisting of growth factors, angiogenic/vasculogenic factors and bone marrow recruiting factors.

56. (Previously presented) The implant of claim 55, wherein the external porous housing is composed of a polymeric mesh.

57. (Currently amended) The ~~method~~ implant of claim 56, wherein the polymeric mesh is composed of one or more polymers selected from the group consisting of nylon, poly-L-lactide (PLA), poly(lactide-co-glycolide) (PLGA), poly(fumaric acid:sebacic acid) co-polymer ~~or~~ and polycaprolactone.

58. (Previously presented) The method of claim 55, wherein the angiogenic/vasculogenic factors are selected from VEGF-A, VEGF-B, VEGF-C, VEGF-D, VEGF-E, aFGF, bFGF, angiopoietin-1, angiopoietin-2, angiogenin, Del-1, follistatin, HGF/SF, leptin, midkine, PLGF, PD-ECGF, PDGF-BB, PTN, progranulin, proliferin, TGF-alpha, TGF-beta, TNF-alpha, IGF-1 and IGF-2, and the bone marrow recruiting factors are selected from GM-CSF, G-SCF, SDF-1α, SDF-1β, MCP-1, stem cell factor/kit ligand, M-CSF, IL-8, SF20 and HCC-1.

59. (Previously presented) The method of claim 55, wherein the one or more factors are GM-CSF and VEGF.

60. (Previously presented) The method of claim 55, wherein the progenitor cells are selected from endothelial progenitor cells, hematopoietic progenitor cells, hemangioblasts, neural progenitor cells, and epithelial progenitor cells.

61. (Previously presented) The method of claim 60, wherein the hematopoietic progenitor cells are CD133+ or CD34+ cells.

Claims 62-64. (Canceled)

65. (New) The method of claim 46, wherein the polymeric mesh is formed of one or more polymers selected from the group consisting of polyamides, polyesters, polypropylene, fluorocarbons, and proteins.

66. (New) The method of claim 44, further comprising removing the implant from the subject and isolating the progenitor cells.

67. (New) The implant of claim 56, wherein the polymeric mesh is formed of one or more polymers selected from the group consisting of polyamides, polyesters, polypropylene, fluorocarbons, and proteins.